

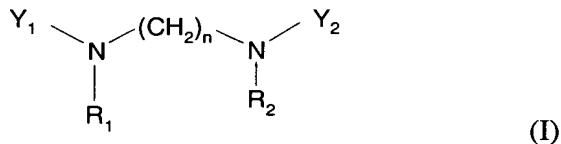
**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1-20 (Canceled)

21. (Previously presented) A method of transferring a DNA or RNA polynucleotide into a eukaryotic cell *in vivo* or *in vitro*, the method comprising contacting the cell with a DNA or RNA polynucleotide and a compound of formula (I):



wherein  $Y_1$  and  $Y_2$ , which may be the same or different, are carbohydrate groups;  
 $R_1$  and  $R_2$ , which may be the same or different, are selected from the group consisting of:  
hydrogen,  
 $C_{(1-24)}$  alkyl group,  
 $C_{(1-24)}$  alkyl carboxy group, and  
a carbon chain of 2 to 24 carbon atoms having one or more carbon/carbon double bonds;  
and  $n$  is from 1 to 10;  
or a pharmaceutically acceptable salt thereof.

22. (Previously presented) The method of claim 21 wherein the carbohydrate groups  $Y_1$  and  $Y_2$  are sugars.

23. (Previously presented) The method of claim 21 wherein  $R_1$  and  $R_2$  are alkyl groups of chain-length  $C_{(10-20)}$  and  $n$  is between 2 and 8.

24. (Previously presented) The method of claim 23 wherein R<sub>1</sub> and R<sub>2</sub> are alkyl groups of chain-length C(12-18) and n is 4 or 6.

25. (Previously presented) The method of claim 21 wherein R<sub>1</sub> and R<sub>2</sub> are carbon chains of 2 to 24 carbon atoms having one or more carbon/carbon double bonds.

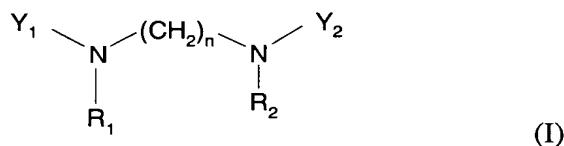
26. (Previously presented) The method of claim 25 wherein the carbon chains have 18 carbon atoms.

27. (Previously presented) The method of claim 21 wherein the compound is symmetrical, that is the groups R<sub>1</sub> and R<sub>2</sub> are the same, and Y<sub>1</sub> and Y<sub>2</sub> are the same.

28-30 (Canceled)

31. (Previously presented) The method of claim 21 wherein the polynucleotide is transferred into the cell in culture.

32. (Currently amended) A compound of formula (I):



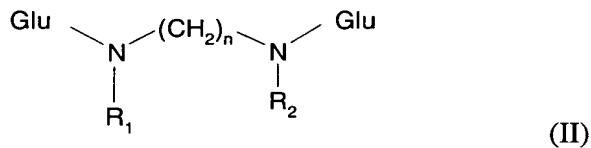
wherein Y<sub>1</sub> and Y<sub>2</sub>, which may be the same or different, are carbohydrate groups; one of R<sub>1</sub> and R<sub>2</sub>; is selected from the group consisting of hydrogen, a C(1-24) alkyl group, a C(1-24) alkylcarboxy group, and a carbon chain of 2 to 24 carbon atoms having one or more carbon/carbon double bonds; the other of R<sub>1</sub> and R<sub>2</sub> is selected from the group consisting of hydrogen, a C(1-24) alkyl group, and a carbon chain of 2 to 24 carbon atoms having one or more carbon/carbon double bonds; and n is from 1 to 10; or a pharmaceutically acceptable salt thereof.

33. (Previously presented) The compound of claim 32 wherein R<sub>1</sub> and R<sub>2</sub> are alkyl groups of chain-length C<sub>(10-20)</sub> and n is between 2 and 8.

34. (Currently amended) The compound of claim 33 32 wherein R<sub>1</sub> and R<sub>2</sub> are alkyl groups of chain-length each C<sub>(12-18)</sub> oleyl, C<sub>12</sub>-alkyl, C<sub>14</sub>-alkyl, C<sub>16</sub>-alkyl, or C<sub>18</sub>-alkyl; Y<sub>1</sub> and Y<sub>2</sub> are each glucitol; and n is 4 or 6.

35. (Previously presented) The compound of claim 32 wherein the compound is a gemini compound where R<sub>1</sub> and R<sub>2</sub> are the same and Y<sub>1</sub> and Y<sub>2</sub> are the same.

36. (Previously presented) The compound of claim 35 which has the formula (II):



wherein Glu is glucose in open chain form (glucitol).

37. (Previously presented) The compound of claim 32 wherein one of R<sub>1</sub> and R<sub>2</sub> is an alkyl group of chain-length C<sub>(1-24)</sub>, and the other of R<sub>1</sub> and R<sub>2</sub> is a C<sub>(1-24)</sub> alkyl carboxy group.

38. (Previously presented) The compound of claim 32 wherein R<sub>1</sub> and R<sub>2</sub> are carbon chains of 2 to 24 carbon atoms having one or more carbon/carbon double bonds.

39. (Previously presented) The compound of claim 38 wherein the carbon chain has 18 carbon atoms.

40-41 (Canceled)